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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,438	08/22/2006	Raphael Teyssie	126551	1310
25944 7590 06/09/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
BAUMSTEIN, KYLE				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
06/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,438

Applicant(s)

TEYSSEIRE, RAPHAEL

Examiner

KYLE BAUMSTEIN

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments, filed 5/27/2009, with respect to claims 1-28 have been fully considered and are persuasive. The rejections of claims 1-28 has been withdrawn. However, upon further consideration, new grounds of rejection are made in light of the following prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims -15, 17-21, 22, 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groth et al. (US Pat. 6281322).

Groth teaches coating compositions containing alkoxyisilane functional groups. The composition comprises an alkoxyisilyl-functional polyisocyanate polyurea which is the reaction product of a polyisocyanate component and an aminosilane corresponding to the following formula:



wherein R represents methyl or ethyl, Y represents methyl, and Z can be H (col. 2, line 15-33). According to the disclosure, polyisocyanate prepared from 4,4'-diisocyanatodicyclohexylmethane are preferred and said isocyanate can be used for the

production of biurets and isocyanurates. Addition products with polyfunctional alcohols such as trimethylolpropane can also be used as well as mixtures of the isocyanate adducts can also be used to prepare the composition (col. 2, line 53-61).

Aminopropyltrimethoxysilane and aminopropyltriethoxysilane are listed as the most preferred aminosilane compounds (col. 3, line 44-45). The use of an adduct of the aforementioned isocyanurate and trimethylolpropane with the preferred aminosilanes would yield a structure similar to that as claimed in claim 22 of the instant application. Regarding claims 13 and 14, trimethylolpropane is listed in the specification of the instant application as the most preferred isocyanate-reactive crosslinker, therefore, the prior art meets these limitations drawn toward the hydroxyl number of the crosslinker. The invented composition can further comprise a silane having the following formula:

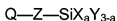


wherein X represents a C₁-C₄ alkyl group and Q is chosen from a group including 3-aminopropyl (col. 5, line 30-43). The addition of such a compound reads on the inclusion of a trialkoxysilane coupling agent having primary amino groups of claims 17 and 18 of the instant application. The composition disclosed in the prior art can also include a solvent selected from a list including inert solvents such as toluene, DMSO, DMF, and xylene among other (col. 5, line 46-57). Regarding claim 19, the Examiner takes official notice that it is obvious to anyone of ordinary skill in the art to add a catalyst to a chemical reaction so as to increase the speed at which the reaction occurs or to initiate the reaction.

Regarding claim 25, the examiner take official notice and maintains that it is common knowledge to use a brush to apply a liquid coating composition to a substrate, using a brush to paint on a substrate has been known to the public for many, many years. It would have been obvious to one having ordinary skill in the art to apply the composition as taught by Groth using a brush as this is a conventional method for applying coatings.

Claims 1, 16, 21, 23, 24, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofacker et al. (US PGPub. 2002/0142169) in view of Goth et al. (US Pat. 6281322).

Hofacker teaches a primer composition containing a solvent-containing polyurethane binder. The binder comprises the addition product of at least one organic polyisocyanate with an alkoxysilane of the following formula:



wherein Q represents a group which can react with isocyanate groups including hydroxy, thiol, and amine groups; Z is preferably a C₁-C₄ alkylene group; X represents a C₁-C₄ alkoxy group; and Y represents a C₁-C₄ alkyl group (¶ 0021-0026). The isocyanates used to prepare the composition include aliphatic isocyanates as well as biurets and isocyanurates of said aliphatic isocyanates (¶ 0031-0032). Suitable alkoxysilane compounds include N-methyl-3-aminopropyltrimethoxysilane and mercaptoalkoxysilanes such as 3-mercaptopropyltrimethoxysilane (¶ 0036-0042). According to the reference, to prepare the primer, the silicon-modified polyisocyanate

prepared by reacting the isocyanate with the alkoxysilane is mixed with a polyol mixture. Included one of the mixtures used is trimethylolpropane (¶ 0083-0088). The addition of trimethylolpropane to the alkoxysilane described by the disclosure would yield a composition having a structure similar to that as claimed in the instant application. Also, the invented composition is claimed to be used as a primer to be used to coat a variety of surfaces, including glass (claim 10). However, there is no mention of the use of primary amine-functionalized alkoxysilanes.

Goth teaches the previously discussed coating composition comprising alkoxysilane functional groups. The composition comprises the reaction product of a polyisocyanate and an aminosilane. The compositions taught by Goth and Hofacker are prepared using similar components and in a similar manner. According to Goth, suitable aminosilanes include 3-aminopropyltrimethoxysilane and 3-(N-methyl-amino)-propyl-trimethoxysilane, the latter being analogous to N-methyl-3-aminopropyltrimethoxysilane disclosed in Hofacker. Goth teaches that N-methyl-3-aminopropyltrimethoxysilane and 3-aminopropylsilane are functional equivalents for the purpose of preparing an alkoxysilane functionalized polyurethane binder composition. It is *prima facie* obvious to substitute art-recognized functional equivalents known for the same purpose (See MPEP § 2144.06). Therefore, it would have been obvious to one having ordinary skill in the art to have used the primary amine-containing 3-aminopropyltrimethoxysilane as the alkoxysilane having an isocyanate-reactive group generically disclosed in Hofacker.

Furthermore, it has been held that the combination of two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition that is to be used for the same purpose may be *prima facie* obvious (*In re Kerkhoven*, 205 USPQ 1069 (CCPA)). Therefore, it would have been obvious to have used a combination of 3-aminopropyltrimethoxysilane and 3-mercaptopropyltrimethoxysilane to prepare the composition disclosed in Hofacker. Such a composition would have the structure as claimed in claims 16 and 23 of the instant application.

Also, regarding claim 25, the rejection stated above is maintained for this reference as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYLE BAUMSTEIN whose telephone number is (571)270-5467. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KBB/

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796